

Date: Thu, 13 Jan 94 20:42:42 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #34
To: Info-Hams

Info-Hams Digest Thu, 13 Jan 94 Volume 94 : Issue 34

Today's Topics:

BALUN problem. Was: DIPOLES FED BY LADDER LINE (2 msgs)
 DIPOLES FED BY LADDER LINE
 DIPOLES FED BY LADDER LINE - Q
Fm Broadcast (Legal Part 15 power levels) - read the rules
 Land mobile mailing list?
 Mac owners....READ THIS!!
 Need SuperMorse (2 msgs)
 Want current DXCC prefix listing

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 13 Jan 94 15:17:32 GMT
From: sdd.hp.com!vixen.cso.uiuc.edu!ux2.cso.uiuc.edu!ignacy@hplabs.hp.com
Subject: BALUN problem. Was: DIPOLES FED BY LADDER LINE
To: info-hams@ucsd.edu

>In a previous article, MAYNARD@URIACC.URI.EDU () says:

>>Please excuse my laziness in not researching this myself...
>>
>> I just bought an antenna tuner and want to put up a dipole fed
>> by 450 ohm ladder line, for use across 160-10 meters. The longest
>> one I have located commercially is one 135ft long with 100ft of
>> feed line

One extra question: how to feed such an antenna? If through an unbalanced

tuner, shack will be RF hot. If also through a balun, the balun may have excessive losses and even generate harmonic. In my case, I tried to feed undersized dipole on 80 through a 1 KW air balun. The balun gets warm and the performance at 100W out is similar to .5W out with a regular dipol. I think that at SWR 10 and above, which would be normal for a ladder-fed dipole, multi-KW balun is needed to handle just 100W. The best option would be a symetric tuner, which is clumsy to build. Any comments?

Ignacy Misztal, N09E, SP8FWB

Date: 14 Jan 94 00:11:58 GMT
From: ogicse!news.tek.com!tekig7!tekig6!royle@network.ucsd.edu
Subject: BALUN problem. Was: DIPOLES FED BY LADDER LINE
To: info-hams@ucsd.edu

I know of only two ways to do a good job of feeding a multiband, balanced antenna. (By "multiband" I mean one which is fed at frequencies far away from resonance.) One is to use a balanced tuner. Link coupling is ideal for this. The other way was described by Al Roehm, W2OBJ in the second ARRL Antenna Compendium. What he did was to use an unbalanced tuner and put the balun at the tuner input. The problems with doing this are:

1. It can be very hazardous. If the tuner is in a metal case, very high RF voltages can appear on it.
2. It must be very well isolated from ground. Even the capacitance to ground must be very small.

A balun will work only if its winding impedance is much higher than the load impedance. This isn't much of a problem if the load impedance is no more than a couple of hundred ohms. But a multiband antenna fed with twinlead feeders can present impedances in the thousands of ohms. You might get lucky and not have a really high impedance show up on any of the bands you operate. (It depends on the frequency, antenna length, feedline impedance, and feedline length). On the other hand, you might not. Depending on the balun type and construction, and the relationship between the balun and load impedances, the balun might do nothing, work properly, or get very hot and possibly ignite or explode. I'm very skeptical of claims of baluns which can reliably work when presented by the impedances you can get feeding a multiband antenna. Al Roehm's method works because it puts the balun at a known, reasonable (50 ohm) impedance point.

Good luck!

73,
Roy Lewallen

W7EL

royle@tekig6.pen.tek.com

Date: 14 Jan 94 02:36:51 GMT
From: news-mail-gateway@ucsd.edu
Subject: DIPOLES FED BY LADDER LINE
To: info-hams@ucsd.edu

MAYNARD@URIACC.URI.EDU (MAYNARD@URIACC.URI.EDU) wrote:

: feed line, for 80-10 meters (much cheaper, incidently, than building
: from scratch with current wire prices!).

Have you considered the possibility of using electric fence wire for antenna building material? You can get a 1000 foot roll for about twelve bucks from places like Southern States feedstores or probably just about any farm supply house.

I know there are gonna be some out there that will poo-poo the idea of electric fence wire for antennas (it wont last, it rusts, doesn't have the strength that hard drawn copper has, etc). But let me tell you, I've used the same dipole on 75 made from electric fence wire for 3 or 4 years without any indication of failure, stretch, rust or anything else.

If it's made for outdoor use and pulled between poles and insulators to keep cows "in check", it must have something going for it..

jd..k1zat

Date: Thu, 13 Jan 1994 01:02:37 GMT
From: swrinde!cs.utexas.edu!uwm.edu!msuinfo!harbinger.cc.monash.edu.au!
bruce.cs.monash.edu.au!trlluna!titan!pcies4.trl.OZ.AU!drew@network.ucsd.edu
Subject: DIPOLES FED BY LADDER LINE - Q
To: info-hams@ucsd.edu

In article <199401121918.LAA17597@ucsd.edu> MAYNARD@URIACC.URI.EDU writes:

>From: MAYNARD@URIACC.URI.EDU

>Subject: DIPOLES FED BY LADDER LINE - Q

>Date: 12 Jan 94 19:07:16 GMT

>Please excuse my laziness in not researching this myself...

>

> I just bought an antenna tuner and want to put up a dipole fed

> by 450 ohm ladder line, for use across 160-10 meters. The longest

> one I have located commercially is one 135ft long with 100ft of
> feed line, for 80-10 meters (much cheaper, incidently, than building
> from scratch with current wire prices!). Anyone have an opinion
> on my going to ~260 ft (yes, I do have room), especially regarding
> performance on higher bands (40-10 meters).
>
> Thanks for reading this, Brian WY2G

Brian, IMHO, the "dipole" fed with open wire line, or 450 ohm ladder line is the best, most versatile HF antenna for amateurs who want to operate all HF bands. Some combinations of antenna + feeder will yield easier matches with your tuner on most bands, but some compromise is generally necessary (see Bill Orr's Wire Antenna book). Generally, the more wire you have in the antenna (or radiating part), and the shorter the feedline part- the better. However, feedline lengths of even 100' should not cause significant loss.

If you choose the 260' model, you may care to have yourself a mini vee-beam (effective at about 10.1MHz and above) by placing the "legs" at about 90 degrees, and pointed at your favourite DX direction. Being unterminated, you get long and short path, depending on time of day, propagation etc. Approximate all-round operation is obtained at 1.8 thru 7MHz. My main HF antenna is one of these, the apex only 34' above ground, and the 135' legs each droop down to about 20'. The intersection of the legs points LP to Europe. This is the best DX antenna I have ever had. Even when conditions are poor, I can mix it with the big boys with their kW and rotatable beams etc.

With so much wire in the air- some sort of lightning protection is advisable. It is a good plan to ground the feedline with a "Frankenstein" style knife switch when the antenna is not in use. Also provide a spark-gap to ground for each side of the feedline as extra insurance should you forget to operate the switch.

73, Drew, VK3XU Telecom Australia Research Laboratories.

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the .".

os give more easily matched eursr

Date: 13 Jan 94 16:31:17 GMT
From: ogicse!uwm.edu!rpi!newsserver.pixel.kodak.com!kodak!ornitz@network.ucsd.edu
Subject: Fm Broadcast (Legal Part 15 power levels) - read the rules

In article <CJJA6J.FW6@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>Barry x24904/ER/167B-TED (ornitz@kodak.rdc.s.kodak.com) wrote:

```
>: PLEASE stop propagating these myths.
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>

>

[illegible]

This is exactly what I am talking about. The rules changed many years ago.

~~~~~

Allow me to make my point again...

 $\wedge \wedge \wedge \wedge$ 

73, Barry WA4VZQ ornitz@kodak.com

Subject: Land mobile mailing list?

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In article <2h44r0$btq@netnews.upenn.edu>,
Jeff Depolo <depolo@eniacy.seas.upenn.edu> wrote:
>Does anyone have the subscription address for the land mobile mailing list?
>
>      --- Jeff
>
>
>--
```

subscribe land-mobile-radio-digest

~jack\_

```
--
/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/
|      Jack C. Lockhart      << SNAILMAIL |
|      Radio Systems Engineer      E-MAIL > LOCKHART@uci.edu |
|OAC-Electronic Communication Srvcs. !BANG! > ...!ucbvax!ucivax!lockhart |
|      2209 Central Plant Building      HAM > WD6AEI |
| University of California, Irvine      AMPR > WD6AEI@n0ary.#nocal.ca.usa.na |
|      Irvine, CA 92717-5475      VOICE > (714) 856-8477 |
|      U.S.A      FAX > (714) 725-2270 |
```

"And in the beginning there was nothing. And God said, 'let there be light'. And there was still nothing, BUT you could see IT!" -Anonymous

[illegible]

\\

Date: Wed, 12 Jan 1994 19:21:42 GMT  
From: news.ucr.edu!library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!  
pipex!uknet!EU.net!news.funet.fi!fuug!krk!krksun.krk.fi!tofi@network.ucsd.edu  
Subject: Mac owners....READ THIS!!  
To: info-hams@ucsd.edu

OK, pals.

Here's a list of Ham related Mac software. The files are in a .Hqx format,  
so just thow me some mail and I'll send you the files you want.

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#### DX Map 1.1

The following is from a help field that can be accessed from within the stack.  
This stack requires the version of Hypercard to be 2.0 or greater.

This stack enables amateur radio operators to find the location, bearing, and  
other information for the 'DXCC' countries of the world. It also displays the  
day and night portions of the globe dynamically.

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#### MacDOVE

MacDOVE is a simple FORTRAN program for decoding or converting recorded DOVE  
telemetry packets into engineering units on a Macintosh 512K, Plus, SE, SE/30,  
or II-series computer. Note that MacDOVE does not decode packets directly  
from a TNC but from a file of packets previously recorded. Both the  
source code and the application are available from the address below.  
The present version of MacDOVE does not use any of the special  
window/menu/mouse features of the Mac  
and so the source code should be compatible with other machines.

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#### MorseTrainer US-1.0.1b20

MorseTrainer is a program for learning and training Morse code. This is the  
first translated version of the program which originally was developed and  
localized for Sweden. The program itself can be considered a final version  
of v1.0.1 but the translation is probably not perfect, hence a beta-release  
instead of final-release.

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#### SunClock

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#### PacketTracker

For the network manager and BBS operator, PacketTracker provides extensive

insight to the operation of the local network and the problems such as excessive retries on a path.

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## SPARKS-II

Morse trainer type.

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## WORLDTIME.sea

- 1) It tells you what time it is in other cities, taking into account Daylight Saving Time/Summer Time.
- 2) It automatically resets your computer's clock at the beginning and end of Daylight Saving Time/Summer Time.
- 3) It allows you to change the location of your computer as it is stored in your computer's memory and reset the clock appropriately.

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## MORSE CODE TUTOR

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### Morse Mania

This program was written as a practice program for people already familiar with the International Morse Code. It allows the user to practice copying Morse code at various speeds and at different audio pitches.

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### MorseMaster

This program can read any TEXT file, but the interval of carriage returns should be less than 256 characters to send correctly. You can open large file, but normally the latter part is truncated (If it is too large, an alert box appears).

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### Grid

This Macintosh program (MacBinary format) converts between coordinates (longitude, latitude in degrees, minutes, seconds) and the grid square locator used by radio amateurs, and vice versa. The old European QTH locator system is supported. The distance and heading between two points on earth can be calculated. The program will automatically recognize the coordinate system used: longitude/latitude, worldwide grid square locator or European QTH locator.

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### OrbiTrack 2.1b14

Satellite Tracking Program

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|--00 Kristoffer Higgström (Kauniainen, Finland)  
C ^ E-Mail: tofi@krk.fi

\ ~/

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Nobody knows who's side he was on  
It's a risk that you take in no mans land  
Nobody knows what made him decide  
To run for freedom and to certain suicide -Marillion

-----  
Date: 13 Jan 94 06:33:14 GMT  
From: ogicse!cs.uoregon.edu!sgiblab!darwin.sura.net!pegasus.cc.ucf.edu!  
pegasus.cc.ucf.edu!not-for-mail@network.ucsd.edu  
Subject: Need SuperMorse  
To: info-hams@ucsd.edu

I would like to obtain a copy of SuperMorse and I understand that it is available as shareware or netware from a number of sources. The only problem is, I'm new to this whole e-mail/unix thing and cannot figure out exactly how to go about retrieving a copy of it. I understand ftp and have been able to transfer files via anonymous ftp before, but I just need specific directions on where exactly to find a copy of SuperMorse. Any returns will be helpful.

Thank you.  
Scott Elias KE4GIT  
ind00152@pegasus.cc.ucf.edu

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Date: 13 Jan 94 17:26:37 GMT  
From: sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!jholly@hplabs.hp.com  
Subject: Need SuperMorse  
To: info-hams@ucsd.edu

Scott Elias (ind00152@pegasus.cc.ucf.edu) wrote:  
: I would like to obtain a copy of SuperMorse and I understand that it is  
: available as shareware or netware from a number of sources. The only  
: problem is, I'm new to this whole e-mail/unix thing and cannot figure out  
: exactly how to go about retrieving a copy of it. I understand ftp and  
: have been able to transfer files via anonymous ftp before, but I just  
: need specific directions on where exactly to find a copy of SuperMorse.  
: Any returns will be helpful.

: Thank you.  
: Scott Elias KE4GIT  
: ind00152@pegasus.cc.ucf.edu

The short answer is it is probably on oak.oakland.edu in /pub/msdos/hamradio.

The long answer is use archie...info follows

To perform an archie search via email, send mail to

archie@<archie\_server>

Where <archie\_server> is the name of an archie host.

The current (and complete) list of archie servers can be found with the "servers" command (described below). A sample list is:

|                     |                 |                              |
|---------------------|-----------------|------------------------------|
| archie.rutgers.edu  | 128.6.18.15     | (USA)                        |
| archie.unl.edu      | 129.93.1.14     | (USA)                        |
| archie.sura.net     | 128.167.254.179 | (USA)                        |
| archie.ans.net      | 147.225.1.2     | (USA)                        |
| archie.au           | 139.130.4.6     | (Australia)                  |
| archie.funet.fi     | 128.214.6.100   | (European server in Finland) |
| archie.sogang.ac.kr | 163.239.1.11    | (Korea)                      |

If you do not get mail back within 2 days or so, try using the "path" command described below.

For your information anonymous FTP may be performed through the mail by various ftp-mail servers. Send a message with the word 'help' in it to:

For BITNET/EARN sites ONLY:

bitftp@pucc.princeton.edu

or (general access):

ftpmail@decwrl.dec.com

for an explanations on how to use them.

The "Subject:" in mail sent to archie is treated as part of the message body.

Command lines begin in the first column. All lines that do not match a valid commands are ignored.

for the complete help instructions use

#### Commands

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In the commands that follow, parameters between '[' and ']' are optional. The ellipsis ("...") signifies that the previous parameter can be repeated multiple times. A '|' character means "or".

help [ <topic> [[ <subtopic> ] ...]]

The "help" command by itself produces this message.

An optional topic and subtopic(s) may also be given. A list of words is considered to be one topic, not a list of individual topics. Thus,

help set maxhits

requests help on the subtopic 'maxhits' of topic 'set', not on two separate topics.

Jim, WA6SDM  
jholly@cup.hp.com

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Date: Tue, 11 Jan 1994 21:05:47 GMT  
From: metro!basser.cs.su.oz.au!harbinger.cc.monash.edu.au!msuinfo!uwm.edu!  
vixen.cso.uiuc.edu!howland.reston.ans.net!cs.utexas.edu!swrinde!sgiblab!  
rpal.rockwell.com!news.cs.@munnnari.oz.au  
Subject: Want current DXCC prefix listing  
To: info-hams@ucsd.edu

Does anyone have a source for the current DXCC prefix vs country list? I'm having trouble keeping up with all the new ones popping up these days.

Dave N3AHF

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Date: 12 Jan 1994 20:52:48 -0500  
From: swrinde!cs.utexas.edu!howland.reston.ans.net!news.intercon.com!panix!not-  
for-mail@network.ucsd.edu  
To: info-hams@ucsd.edu

References <1994Jan6.142611.20958@webo.dg.com>, <2gih9o\$6rl@reznor.larc.nasa.gov>,  
<2h0aks\$281v@ilx018.intel.com>

Subject : ARRL NNJ 94-002 NJ DEPE HEARING

SB ARL @ NJNET < NW2L \$11721\_KB7UV  
ARL NNJ 94-002 NJ DEPE HEARING  
R:940112/1356 77257@KB7UV.#NLI.NY.USA.NA

Date: Wed, 12 Jan 94 13:56:38 UTC  
From: nw2l@kb7uv.#nli.ny.usa.na (Rich Moseson)  
Message-ID: <11721\_KB7UV> (Astoria, NY)  
Reply-To: nw2l@wa2jvm.#nnj.nj.usa.na  
To: arl@njnet  
Subject: ARL NNJ 94-002 NJ DEPE HEARING

ARL NNJ 94-002 -- NJ DEPE HEARING

HR ARRL NNJ SECTION BULLETIN 94-002  
FROM ARRL NNJ SECTION MANAGER RICH MOSESON, NW2L  
JANUARY 11, 1994

TO ALL RADIO AMATEURS / NNJ SECTION:

Amateur radio and the ARRL were well-represented at today's hearing by the New Jersey Department of Environmental Protection and Energy on its proposal to regulate RF transmitting sources in the state. DEPE officials had said that amateur radio would be exempted from the proposed registration and fee proposals for now, but did not include an exemption in the proposed regulation, and specifically invited comments on whether amateurs should be subject to them in the future. The public hearing in Trenton on January 11 was attended by approximately 50 people, some 25 percent of whom were hams. None of the approximately 20 speakers supported the proposed regulation.

ARRL General Counsel Chris Imlay, N3AKD, and ARRL Northern New Jersey Section Manager Rich Moseson, NW2L, spoke on behalf of the League and its more than 5,000 members in New Jersey. They were joined by state Army MARS Director Sanford Weinberger, AAA2NJ/N2BOT, and several other hams. Other ARRL leadership volunteers at the hearing included Southern New Jersey Section Traffic Manager Gene Bond, WB2UVB; Middlesex County District Emergency Coordinator Stan Olochwoszcz, N2AYJ; Morristown Emergency Coordinator Harvey Klein, WS2Q; New Jersey Phone Net Manager Dave Popkin, W2CC; Local Government Liaison Bill Sohl, K2UNK, and Hudson Division Assistant Director Ben Friedland, K2PBP.

Testimony was opened by Vivian Lopez, N2NZN, who challenged the state's authority to impose the regulations in the first place. Imlay and Moseson, representing the ARRL, argued that only the FCC had the power to license and regulate radio transmitters, and that applying the proposed regulations to hams would effectively preclude amateur

communications in New Jersey -- a violation of FCC rules. A specific exemption for hams was requested.

Written comments are due by January 20, although the comment period may be extended. A final decision on the proposal must be made by next December.

AR

/EX

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----- Andrew Funk, KB7UV -----
| President, Tri-State Amateur Repeater Council (TSARC) |
| ENG Editor/Microwave Control, WCBS-TV Channel 2 News, New York |
| Internet: kb7uv@panix.com Packet: kb7uv@kb7uv.#nli.ny.usa |
```

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Date: 12 Jan 1994 07:59:24 GMT  
From: olivea!inews.intel.com!ilx018.intel.com!ilx118!dbraun@uunet.uu.net  
To: info-hams@ucsd.edu

References <2gdjdr\$roe@samba.oit.unc.edu>, <1994Jan6.142611.20958@webo.dg.com>,  
<2gih9o\$6rl@reznor.larc.nasa.gov>dbraun  
Reply-To : dbraun@iil.intel.com  
Subject : Re: DEP May Impose Fees On YOU!

In article <2gih9o\$6rl@reznor.larc.nasa.gov>, kludge@grissom.larc.nasa.gov (Scott Dorsey) writes:

|>  
|> Yes, but everything with an oscillator in it is RF transmitting equipment.  
|> If you don't believe me, put a radio next to your terminal. It's radiating  
|> plenty. Inadvertently perhaps, but still enough to tax.

If you look at the actual power density numbers in proposal that was posted, and do a bit of arithmetic, you will find that you need a hefty power output (100's of watts) within 20 or 30 feet to exceed the limits. If you are running a kW twenty feet from your neighbor's bedroom, they have a right to get upset.

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-----  
Doug Braun Intel Israel, Ltd. M/S: IDC-42 (new mailstop!)  
Tel: 011-972-4-655069 dbraun@inside.intel.com

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End of Info-Hams Digest V94 #34

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